

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A projector, comprising:

a light source;

a color separating optical system to separate a light flux emitted from the light source into a plurality of color light components;

a plurality of optical modulation devices to modulate the color light components separated by the color separating optical system according to image information, respectively;

a color combining optical system to combine optical images modulated by the plurality of optical modulation devices; and

a projection optical system to enlarge and project the optical images combined by the color combining optical system, an optical filter, to reflect predetermined spectral components in the light flux, being arranged at a position where an angle by which the light flux expands falls within  $20^\circ$  with respect to an illumination optical axis of the light flux on an optical path from the light source to a light flux-emitting surface of the projection optical system.

2. (Previously Presented) The projector according to Claim 1, further comprising:

a case to house a plurality of optical components disposed on the optical path of the light flux, the case including a moving mechanism to move the optical filter into and out of the optical path.

3. (Previously Presented) The projector according to Claim 1,  
the optical filter being disposed between the light source and the color  
separating optical system.

4. (Previously Presented) The projector according to Claim 3, further  
comprising:

a uniform-illumination optical system disposed between the light source  
device and the color separating optical system to divide the light flux emitted from the light  
source device into a plurality of partial light fluxes and overlapping the respective partial light  
fluxes on an image forming area of the optical modulation device, the optical filter being  
disposed in the uniform-illumination optical system.

5. (Previously Presented) The projector according to Claim 1,  
the optical filter being disposed in the color separating optical system.

6. (Currently Amended) The projector according to Claim 5,  
the color separating optical system including a first color light separating  
optical element to separate the light emitted from the light source into a first color light  
component and other color light components, and a second color light separating optical  
element to separate the other color light components separated by the first color light  
separating optical element into a second color light component and a ~~second~~third color light  
component, and

the optical filter being disposed between the first color light separating optical  
element and the second color light separating optical element.

7. (Previously Presented) The projector according to Claim 1,  
the optical filter being disposed between the color combining optical system  
and the projection optical system.

8. (Currently Amended) A projector, comprising:

- a light source;
- a color separating optical system to separate a light flux emitted from the light source into a plurality of color light components;
- a plurality of optical modulation devices to modulate the ~~plurality of light fluxes~~ color light components separated by the color separating optical system according to image information, respectively;
- a color combining optical system to combine optical images modulated by the plurality of optical modulation devices;
- a projection optical system to enlarge and project the optical images combined by the color combining optical system;
- a case to house a plurality of optical components, disposed on an optical path of the light flux;
- an optical filter to reflect predetermined spectral components in the light flux;

and

- a moving mechanism to move the optical filter into and out of the optical path by rotating the optical filter inside the case.

9. (Previously Presented) The projector according to Claim 8,

- the moving mechanism rotating the optical filter between a position at which the light flux passes through and a position at which the light flux does not pass through along a side wall on the optical path in the case.

10. (Previously Presented) The projector according to Claim 8, further comprising:

- a uniform-illumination optical system disposed between the light source and the color separating optical system to divide the light flux emitted from the light source into a

plurality of partial light fluxes and overlapping the respective partial light fluxes on an image forming area of the optical modulation device,

the optical filter being disposed in the uniform-illumination optical system.

11. (Previously Presented) The projector according to Claim 8,

the optical filter being disposed in the color separating optical system.

12. (Previously Presented) The projector according to Claim 11,

the color separating optical system includes:

a first color light separating optical element to separate the light emitted from the light source device into a first color light component and other color light components;

and

a second color light separating optical element to separate the other color light components separated by the first color light separating optical element into a second color light component and a third color light component, and

the optical filter being disposed between the first color light separating optical element and the second color light separating optical element.

13. (Previously Presented) The projector according to Claim 8,

the case having a plane substantially parallel to a plane formed by an illumination optical axis of the optical path,

the moving mechanism including a rotating portion rotatably supported by the plane of the case, and

the optical filter being retained in the rotating portion and moving according to rotational movement of the rotating portion.

14. (Previously Presented) The projector according to Claim 13,

the optical filter being mounted in a filter frame having a retaining portion protruded from the optical filter,

the rotating portion having an engagement hole engaged with the retaining portion in the filter frame, and

a guide groove being disposed between the optical filter and the rotating portion to guide the movement of the optical filter by guiding the retaining portion.

15. (Previously Presented) A projector, comprising:

a light source;

a color separating optical system to separate a light flux emitted from the light source into a plurality of color light components;

a plurality of optical modulation devices to modulate the plurality of color light components separated by the color separating optical system according to image information, respectively;

a color combining optical system to combine optical images modulated by the plurality of optical modulation devices;

a projection optical system to enlarge and project the optical images combined by the color combining optical system,

an optical filter to reflect predetermined spectral components in the light flux;  
and

a moving mechanism to move the optical filter into and out of the optical path, the moving mechanism sliding the optical filter out of the optical path by allowing a first side, which is closer to an optical component downstream in the optical path from the optical filter and remoter from an optical component upstream in the optical path from the optical filter, to move upstream in the optical path and by allowing a second opposite side to be positioned downstream in the optical path, from among the two sides of the optical filter perpendicular to a plane formed by an illumination optical axis.

16. (Previously Presented) The projector according to Claim 15,  
the moving mechanism including:  
a first shaft to support a portion of a side different from the first and second  
sides of the optical filter and disposed in the vicinity of the first side;  
a second shaft to support a portion of the side different from the first and  
second sides of the optical filter and closer to the second side from the first side;  
a first guide groove to guide the first shaft so that the first shaft is movable  
along a direction substantially parallel to the illumination optical axis; and  
a second guide groove to guide the second shaft so that the second shaft is  
movable along a direction which is not parallel to the illumination optical axis.
17. (Previously Presented) The projector according to Claim 16,  
the moving mechanism including a rotating portion rotatably supported on a  
plane parallel to the plane formed by the illumination optical axis, and  
the first shaft and the second shaft being retained in the rotating portion  
through the first guide groove and the second guide groove, respectively.
18. (Previously Presented) A projector, comprising:  
a light source device;  
a color separating optical system to separate a light flux emitted from the light  
source device into a plurality of color light components;  
a plurality of optical modulation devices to modulate the plurality of color  
light components separated by the color separating optical system according to image  
information, respectively;  
a color combining optical system to combine optical images modulated by the  
plurality of optical modulation devices;

a projection optical system to enlarge and project the optical images combined by the color combining optical system,

an optical filter to reflect predetermined spectral components in the light flux;

a moving mechanism to move the optical filter into and out of the optical path,

and

the moving mechanism moving the optical filter out of the optical path, by allowing an opposite side to be rotated using, as a shaft, the vicinity of a side which is closer to an optical component downstream in the optical path from the optical filter and remoter from an optical component upstream in the optical path from the optical filter, from among the two sides of the optical filter perpendicular to a plane formed by an illumination optical axis.

19. (Previously Presented) The projector according to Claim 15,

the optical filter being disposed between the light source device and the color separating optical system.

20. (Previously Presented) The projector according to Claim 19, further comprising:

a uniform-illumination optical system disposed between the light source device and the color separating optical system to divide the light flux emitted from the light source device into a plurality of partial light fluxes and overlapping the respective partial light fluxes on an image forming area of the optical modulation device,

the moving mechanism being disposed in the uniform-illumination optical system.

21. (Previously Presented) The projector according to Claim 15,

the optical filter being disposed in the color separating optical system.

22. (Currently Amended) The projector according to Claim 21,  
the color separating optical system including a first color light separating optical element to separate the light emitted from the light source device into a first color light component and other color light components, and a second color light separating optical element to separate the other color light components separated by the first color light separating optical element into a second color light component and a ~~second~~third color light component, and wherein the optical filter being disposed between the first color light separating optical element and the second color light separating optical element.

23. (Previously Presented) The projector according to Claim 15,  
the optical filter being disposed between the color combining optical system and the projection optical system.